



# UNIVERSITY OF NIŠ

**Course Unit Descriptor**

**Faculty**

Faculty of Mechanical Engineering in Nis

## GENERAL INFORMATION

Study Program	<b>Mechanical Engineering</b>		
Study Module (if applicable)	-		
Course Title	Information systems in manufacturing		
Level of Study	Bachelor	<input type="checkbox"/> Master's	x Doctoral
Type of Course	<input type="checkbox"/> Obligatory	<input checked="" type="checkbox"/> Elective	
Semester	<input checked="" type="checkbox"/> Autumn	<input type="checkbox"/> Spring	
Year of Study	II		
Number of ECTS Allocated	10		
Name of Lecturer/Lecturers	Miroslav D. Trajanovic		
Teaching Mode	<input checked="" type="checkbox"/> Lectures	<input type="checkbox"/> Group tutorials	<input type="checkbox"/> Individual tutorials
	<input checked="" type="checkbox"/> Laboratory work	x Project work	x Seminar
	<input type="checkbox"/> Distance learning	<input type="checkbox"/> Blended learning	<input type="checkbox"/> Other

## Purpose and Overview (max. 5 sentences)

Detailed analysis of the functions and components of the manufacturing information systems. Analysis of the methods for design and implementation of manufacturing information systems and their components.

## Syllabus (brief outline and summary of topics, max. 10 sentences)

- *Theory*
  - Key concepts of manufacturing information systems: Information requirements in production systems, Manufacturing information, Manufacturing databases
  - Enterprise Resource Planning (ERP) systems
  - Manufacturing Workflow systems
  - Supply Chain Management (SCM) systems
  - Manufacturing data acquisition systems
  - Industrial communication systems
  - Information systems for Collaborative Networked Organizations
  - Integration of the manufacturing information systems
  - Strategic impact of the manufacturing information systems
  - *Practice*
- Definition of the requirements, design and implementation of the manufacturing information systems in a real case scenario. Re-engineering of the existing manufacturing information system

## Language of Instruction

- Serbian (complete course)       English (complete course)       Other \_\_\_\_\_ (complete course)
- Serbian with English mentoring       Serbian with other mentoring \_\_\_\_\_

<b>Assessment Methods and Criteria</b>			
<b>Pre exam Duties</b>	<b>Points</b>	<b>Final Exam</b>	<b>Points</b>
<b>Activity During Lectures</b>		<b>Written Examination</b>	
<b>Practical Teaching</b>	<b>70</b>	<b>Oral Examination</b>	<b>30</b>
<b>Teaching Colloquia</b>		<b>Overall Sum</b>	<b>100</b>
<b>*Final examination mark is formed in accordance with the Institutional documents</b>			